

MEETING THE DUAL CHALLENGE

**A Roadmap to At-Scale Deployment of
CARBON CAPTURE, USE, AND STORAGE**

**ACRONYMS
AND ABBREVIATIONS**



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ACRONYMS AND ABBREVIATIONS

ADM	Archer Daniels Midland Company	CCU	carbon capture and use
ANSI	American National Standards Institute	CCUS	carbon capture, use, and storage
AoR	Area of Review	CES	Clean Energy Standard
ARB	Air Resource Board (California)	CFD	contract for difference
ARPA-E	Advanced Research Projects Agency of the Department of Energy	CFR	Code of Federal Regulations
BBA	Bipartisan Budget Act (2018)	CHP	combined heat and power
BCF/D	billion cubic feet per day	CO ₂	carbon dioxide
BECCS	bioenergy carbon capture and storage	CO ₂ e	carbon dioxide equivalent
BEG	Bureau of Economic Geology (University of Texas)	COG	coke oven gas
BF	blast furnace	CRI	Carbon Recycling International
BOF	basic oxygen furnace	DAC	direct air capture
BLGCC	black liquor integrated gasification combined cycle	DOE	Department of Energy
BLM	Bureau of Land Management	DOI	Department of the Interior
BOEM	Bureau of Ocean Energy Management	DOT	Department of Transportation
BOF	basic oxygen furnace	EAF	electric arc furnaces
BSCF/D	billion standard cubic feet per day	EEZ	exclusive economic zone
BSEE	Bureau of Safety and Environmental Enforcement	EIA	Energy Information Administration
BTU	British thermal unit	EOR	enhanced oil recovery
CaCO ₃	calcium carbonate	EPA	Environmental Protection Agency
CAG	CCUS Advisory Group	ESP	Energy Saving Process
CAP	closure assurance period	ETIA	Energy Tax Incentives Act
CCPI	Clean Coal Power Initiative	ETS	emissions trading systems
CCS	carbon capture and storage	FCC	fluid catalytic cracking
		FER&D	Fossil Energy Research and Development
		FERC	Federal Energy Regulatory Commission

FLIGHT	Facility Level Information on Greenhouse gases Tool	MMB/D	million barrels per day
FUTURE	Furthering carbon capture, Utilization, Technology, Underground storage, and Reduced Emissions Act	MMBTU	million British thermal units
GDP	gross domestic product	MMCF/D	million cubic feet per day
GHG	greenhouse gas	MMP	minimum miscibility pressure
GJ	gigajoule	MMscf	million standard cubic feet
GOM	Gulf of Mexico	MOF	metal-organic frameworks
GOR	gas oil ratio	MPRSA	Marine Protection, Research, and Sanctuaries Act
GS	geologic storage	Mt	million tonnes
Gt	gigatonnes	Mtpa	million tonnes per annum
H ₂	hydrogen	MTR	Membrane Technology and Research, Inc.
HCPV	hydrocarbon pore volume	MW	megawatts
IEA	International Energy Agency	MWe	megawatts-electric
IEAGHG	IEA Greenhouse Gas R&D Programme	MWh	megawatt hour
IGCC	integrated gasification combined cycle	NASEM	National Academies of Sciences, Engineering, and Medicine
IL-ICCS	Illinois Industrial Carbon Capture and Storage	NCCC	National Carbon Capture Center
IPCC	Intergovernmental Panel on Climate Change	NEPA	National Environmental Policy Act
IRS	Internal Revenue Service	NETL	National Energy Technology Laboratory
ISO	International Standards Organization	NGCC	natural gas combined cycle
ITC	Investment Tax Credit	NGO	nongovernmental organizations
K	Kelvin	NIMBY	not in my backyard
kJ	kilojoule	NPC	National Petroleum Council
kJ/mol	kilojoules per mole	NPS	New Policies Scenario
LED	light-emitting diode	NRAP	National Risk Assessment Partnership
LNG	liquefied natural gas	NUMBY	not under my backyard
LPG	liquefied petroleum gas	OCS	Outer Continental Shelf
LVC	lean vapor compression	OCSLA	Outer Continental Shelf Lands Act
MDEA	methyldiethanolamine	OECD	Organisation for Economic Co-operation
MEA	monoethanolamine	OOIP	original oil in place
MES	microbial electrosynthesis	PCC	precipitated calcium carbonate
µm	micrometer	PEM	proton exchange membrane
MLA	Mineral Leasing Act	PHMSA	Pipeline and Hazardous Materials Administration
MLP	master limited partnerships		

PIM	porous inorganic membranes	SOA	state-of-the-art
PISC	post-injection site care	SOE	solid-oxide reactor
ppm	parts per million	SSEB	Southern States Energy Board
PSA	pressure swing adsorption	STB	Surface Transport Board
psi	pounds per square inch	STEPS	Stated (Energy) Policies Scenarios
psig	pounds per square inch gauge	TCF	trillion cubic feet
PTC	production tax credit	TCM	Technology Centre Mongstad
R&D	research and development	TIFIA	Transportation Infrastructure Finance and Innovation Act
RCP	reinjection compression plant	TRL	technology readiness level
RCSP	DOE's Regional Carbon Sequestration Partnerships	TSA	temperature swing adsorption
RD&D	research, development, and demonstration	UF	utilization factor
ROZ	residual oil zone	UIC	underground injection control
RPS	renewable portfolio standard	USDA	U.S. Department of Agriculture
RTO	regional transmission organization	USDW	underground sources of drinking water
SACROC	Scurry Area Canyon Reef Operators	USGS	U.S. Geological Survey
SDS	Sustainable Development Scenario	VSA	vacuum swing adsorption
SDWA	Safe Drinking Water Act	WAG	water alternating gas
SMR	steam methane reforming		

